

**PHASED ARRAY ANTENNA WITH EDGE
ELEMENTS AND ASSOCIATED METHODS**

Abstract of the Disclosure

A phased array antenna includes a substrate having a first surface, and a second surface adjacent thereto and defining an edge therebetween. A plurality of dipole antenna elements are on the first surface, and at least a portion of at least one dipole antenna element is on the second surface. Each dipole antenna element includes a medial feed portion and a pair of legs extending outwardly therefrom. Adjacent legs of adjacent dipole antenna elements on the first and second surfaces include respective spaced apart end portions having predetermined shapes and relative positioning for providing increased capacitive coupling between the adjacent dipole antenna elements.